

# Mississippi River/Gulf of Mexico Hypoxia Task Force Newsletter

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## HTF HIGHLIGHTS

### STATE ACTIVITIES

### FEDERAL ACTIVITIES

### RESOURCES

## Hypoxia Task Force Highlights

The Hypoxia Task Force is planning a virtual public meeting for Fall 2021, information will be published [here](#).

On Earth Day, Illinois Department of Agriculture Director Jerry Costello II, Indiana State Department of Agriculture Deputy Director Jordan Seger, and Iowa Secretary of Agriculture and HTF Co-Chair Mike Naig wrote an [OpEd](#) published in multiple news outlets detailing the water quality initiatives underway in Hypoxia Task Force member states. It highlighted collaborative conservation measures taken by member states to work toward the HTF goals. One example of this collaboration is an initiative the three states have taken with the United States Department of Agriculture (USDA) to discount cover crop insurance and encourage farmers to plant cover crops that improve soil and water quality while preventing erosion.

## State Activities

### Tennessee Adds Post-Construction Standards and Riparian Buffers to Amended Stormwater Rules

The Tennessee Board of Water Quality, Oil, and Gas amended rules governing the state's Municipal Separate Storm Sewer System (MS4) Stormwater General Permit, (Rule Chapter 0400-40-10, National Pollutant Discharge Elimination System General Permits). This action provides the state with improved tools to implement its Nutrient Reduction Strategy and enables local governments to manage post-construction stormwater with new stormwater standards, including riparian buffers, to comply with effluent limitations in accordance with Tennessee law.

The stormwater standards require new development and redevelopment project designs to reduce pollutants to the maximum extent practicable through the installation of storm water control measures (SCM) that include green infrastructure treatments such as infiltration, biologically active filtration or detention ponds. MS4 permit compliance is determined by the implementation of the required design, installation, and maintenance of SCMs with a goal of achieving a minimum treatment efficiency of 80% Total Suspended Solids removal from the water quality treatment

volume. The water quality treatment design storm is a 1-year, 24-hour storm event and the quantity of the water quality treatment volume depends on the type of treatment provided.

Site permittees must develop and implement designs to establish, protect, and maintain permanent water quality riparian buffers in riparian areas impacted by new development and redevelopment projects. These buffers are the same as those required during construction under Tennessee's construction general permit. Design requirements include that stormwater discharges must enter buffers as sheet flow instead of concentrated flow, minimum riparian buffer widths, restriction of buffer area uses, and vegetation type based on site-specific conditions.

[Read more](#)

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## Kentucky Publishes 2021 Loads and Yields Study in Advance of Strategy Update

The Kentucky Division of Water (KDOW) updated its [2019 Loads and Yields Study](#) that determines ongoing trends and evaluates progress in reducing Kentucky's nutrient load contribution to the Gulf of Mexico. This update uses new KDOW data (2018-2019) and partner data from the [Ohio River Valley Water Sanitation Commission \(ORSANCO\)](#). Overlapping the two data sets expands coverage of Kentucky's drainage area from 76% to 82%, while identifying out-of-state nutrient contributions. KDOW also compared annual rainfall totals with nutrient loads to evaluate potential drivers of annual nutrient variability.

The KDOW [2021 Update to the 2019 Nutrient Loads and Yields in Kentucky Study](#) serves as a critical foundation for Kentucky's upcoming 2021 Nutrient Reduction Strategy (NRS) Update. The 2021 NRS Update prioritizes high yield watersheds in a data-driven approach to nutrient reduction. The KDOW interactive [Nutrient Reduction in Kentucky](#) map improves nutrient data and decision-making transparency by allowing users to explore nutrient loads in local watersheds, review land use, and view watershed investments from the KDOW and Section 319 Nonpoint Source Program.

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## Louisiana Nutrient Reduction and Management Strategy: 2020 Annual Report

The [Louisiana Nutrient Reduction and Management Strategy: 2020 Annual Report](#) was released in April 2021 on the Louisiana Strategy Website, which is the home for information regarding Louisiana's nutrient efforts. This report highlights advancements made during the previous calendar year by the Strategy Team and stakeholders in support of the 10 Actions outlined in the state's 5-year Strategy (2019).

Accomplishments of note in 2020 include: the Governor's Office of Coastal Activities joined the Strategy Team, TMDL 'New Vision' progress was shown across all priority projects, public outreach on nutrient efforts was accomplished via 200+ events, water quality monitoring was extended via several new projects, 13 decision support tools were highlighted, monitoring and/or practice implementation occurred in 11 watersheds with over 600,000 acres receiving conservation practices, and Deepwater Horizon Natural Resource Damage Assessment funds supported four nutrient-related projects within the state.

Louisiana invites the HTF member states and members of the public to view our website and materials, and [correspondence is welcomed](#).

[Learn more](#)

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## **Small Minnesota Cities to Make Big Decreases in Phosphorus Wastewater Discharges**

Although small in population, two southern Minnesota cities are among the top three dischargers of wastewater phosphorus in the state, and that's now about to change for the better. Based on state regulations and recent Total Maximum Daily Load studies, the Minnesota Pollution Control Agency is issuing stricter permit limits on phosphorus discharges to rivers, including tributaries to the Mississippi River.

The City of Austin, population 25,114, is replacing its 83-year-old wastewater treatment facility. This will vastly reduce the amount of phosphorus that it discharges to the Cedar River during the summer, from an average of 37,000 pounds to about 7,000 pounds, a decrease of 81%.

The City of Albert Lea, population 17,773, also plans to upgrade its 40-year-old wastewater treatment facility. Its phosphorus discharge to the Shell Rock River will drop from an average of 69,100 pounds per year to a maximum of 20,730 pounds, a decrease of 70%.

[Read more about phosphorus in wastewater](#)

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## **New Study Highlights Higher Profits for Water Quality Certified Farms in Minnesota**

A new study by the Minnesota State Agricultural Centers of Excellence shows that farmers enrolled in the Minnesota Agricultural Water Quality Certification Program (MAWQCP) had higher profits than non-certified farms. This marks the second year of data highlighting improved financial outcomes, serving as an early indicator of a positive return on investment for the whole-farm conservation management implemented for certification. Profits of MAWQCP-certified farmers were an average of \$40,000 or 18% higher in 2020 and \$19,000 or 20% higher in 2019. Other key financial metrics are also better for those enrolled in the MAWQCP, such as debt-to-asset ratios and operating expense ratios. Over 1,060 producers and 760,000 acres have been certified through the Minnesota Agricultural Water Quality Certification Program, with those farms reducing Nitrogen losses by up to 49% and saving more than 113,000 tons of soil every year, among other environmental outcomes achieved.

[Read more](#)

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## **Indiana 2020 Conservation Accomplishments**

The Indiana Conservation Partnership (ICP) consists of eight Indiana agencies and organizations working together to support Hoosier landowners to provide technical or financial assistance for the implementation of conservation projects. The ICP implements the Indiana State Nutrient Reduction

Strategy under the leadership of the Indiana State Department of Agriculture and the Indiana Department of Environmental Management. In 2020, Indiana landowners supported by the ICP installed more than 32,000 new conservation practices. The 2020 Conservation Accomplishments report provides reduction estimates of sediment and nutrients entering Indiana's waterways as well as carbon sequestration by cover crops.

The Accomplishments report showed that landowners helped prevent more than one million tons of sediment, 2.2 million pounds of nitrogen, and 1.1 million pounds of phosphorus from entering Indiana waterways, equal to enough phosphorus to fill over five fifty-foot train cars, enough nitrogen to fill over 11 fifty-foot train cars, and almost 11,000 fifty-foot train cars with sediment.

Cover crops were planted on 232,000 acres with ICP assistance, which sequestered almost 148,000 tons of carbon from the atmosphere, equal to the emissions of more than 28,900 cars. Many more acres of cover crops were planted by landowners without assistance from the ICP.

Read the [report](#) and [other supporting information](#)

## Federal Activities

### 2021 Gulf of Mexico Dead Zone is Larger Than Average

Louisiana State University and Louisiana Universities Marine Consortium scientists say the Gulf of Mexico hypoxic zone was larger than average in this summer's NOAA-supported cruise of the zone. The cruise took place from July 25 through Aug. 1, finding that the hypoxic zone is approximately 6,334 square miles. The average zone for the past five years is 5,380 square miles, and the scientists said river discharge and nutrient loads played a role in this year's larger-than-average zone size. In June, NOAA had forecasted a hypoxic zone of 4,880 square miles using Mississippi River discharge and nutrient runoff data from the U.S. Geological Survey. While the cruise ended with a larger measurement, the results were still within the margin of uncertainty for the NOAA forecast. The Hypoxia Task Force has set a goal of reducing the hypoxic zone to less than 1,900 square miles by 2023. To do this, the task force works in coordination with federal agencies, states and farmers to fund conservation investments and support nutrient reduction efforts in the Mississippi/Atchafalaya River Basin.

[Read more](#)

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### EPA Farmer to Farmer Grants

In June, EPA announced the selection of twelve projects to receive "Farmer to Farmer" grant funding totaling \$10,951,735. EPA's grants support the leadership of farmers in improving water quality, habitat, resilience, and peer-to-peer information exchange to benefit communities and ecosystems in the Gulf of Mexico Watershed.

The collaboration of a wide range of stakeholders and organizations across an entire watershed is vital to reducing nutrient pollution to our water and air. Farmers can play an important leadership role in these efforts when they get involved and engage with their State governments, farm organizations, conservation groups, educational institutions, non-profit organizations, and community groups.

[Read more](#)

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## EPA Releases National Water Quality Initiative (NWQI) Practitioners Guide

In collaboration with the USDA Natural Resources Conservation Service (NRCS), EPA has published *Planning and Implementing Agricultural Water Quality Projects Through the National Water Quality Initiative: a Practitioners Guide* on EPA's webpages. The document provides a resource for EPA staff, NRCS staff, and state agency partners involved in implementing the NWQI, describing the structure of the initiative, its focus on accelerating water quality progress, and the roles of agency staff and stakeholders in planning, implementing, and monitoring water quality results for NWQI projects. The Guide will be useful for anyone interested in learning about the NWQI and agricultural water quality projects.

[Read the guide](#)

## Resources

### HTF Monitoring Workgroup

The Hypoxia Task Force established a monitoring workgroup at the February 2020 HTF meeting in Washington, D.C. with workgroup members from HTF member states, EPA, the USGS, and USDA. The workgroup's primary objective was to evaluate funding needs to support existing and potential new monitoring in the Mississippi-Atchafalaya River basin, particularly to track loads and trends in large rivers to help states evaluate progress toward meeting nutrient reduction goals and to support adaptive management of nutrient reduction strategies. The workgroup has completed its analysis and submitted its evaluation in a letter to the HTF for the Task Force's consideration.

[Read the letter and evaluation](#)

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### Hypoxia Task Force Workgroups

A new webpage has been published on the HTF website with information on ten workgroups the HTF established to track progress and address priority needs that state members identified to support implementation of their nutrient reduction strategies. These workgroups consist of federal and state members working to capture, quantify, and communicate metrics to assess progress towards the HTF's goal; explore policy solutions to multi-state issues; communicate results to the public; advance research to address known gaps; and optimize funding available to support nutrient management strategies.

[Read more](#)

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### Visit the EPA Hypoxia Task Force Website

To learn more about the work of the Hypoxia Task Force, visit our website, which features recent reports and measurements, important documents, upcoming actions, and learning opportunities. The “In the Spotlight” section of the homepage provides a great introduction.

[Check out the HTF Homepage](#)

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[Sign Up for the HTF Newsletter](#)

The *Mississippi River/Gulf of Mexico Hypoxia Task Force Newsletter* is a quarterly publication produced by EPA's Office of Water in partnership with the Hypoxia Task Force. The newsletter provides a snapshot of recent state activities, federal agency activities, publications, and resources.

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